Volume 2005 Issue 2

# Project Newsletter



Hello! The Northern Tier Interoperability Project (NTIP) is ramping up nicely this month. The committees are working hard on the details of the project under the direction of the Northern Tier Interoperability Consortium (NTIC) Board.

# Project Update



The NTIC Board has held two monthly meetings, February 3rd and March 3rd 2005, at the Great Northern in Havre. A draft budget and workplan have been prepared for the project and are being refined into working documents. The momentum of the NTIP is gaining, with agencies from all levels of government entering into discussions with the NTIC to understand the goals of the project, and to explore how they can contribute to the effort for mutual benefit:

- A representative from the Montana National Guard, spoke with the Board about their wireless data and voice linkage project to connect the armories in Helena and Great Falls. He explained that his commanders feel the intent is to go beyond Great Falls, and to cooperate with local groups, including the NTIC. The Guard is very interested in a formal partnership with the Consortium in the form of an MOU.
- A representative from the Montana Highway Patrol, spoke with the Board about their Mobile Data project and how it and the NTIP project could compliment each other.
- A representative from the Border Patrol provided a brief update of their existing radio system to a three zone vote-scan system. They are interested in learning more about NTIP and how the systems might be compatible.
- A representative from the Board of Crime Control provided an update to the truck inspection grant opportunity. The proposal, involving two trailers and training/participation by NTIC law enforcement agencies was discussed.
- A representative from Glacier National Park spoke with the Board on the needs of the park for connectivity between East and West Glacier. In a partnership with the NTIC, they could contribute to the development of the Divide Mountain site.







# Project Update (Continued)

 A representative from the State of Montana DPHHS, provided an update on their communication system, current updates, and direction for future projects including compatibility with the NTIC system.

The NTIC Board approved several key initiatives for the project:



- The Board approved the Technical and Contract Negotiation teams to move forward with pursuing options for frequency and microwave services.
- The Board also approved the Contract Negotiation team to enter into contract negotiations with Motorola Corporation.

# Team Updates



The Technical Team has been busy working to prepare the groundwork for a detailed design of both the radio and microwave infrastructures. First, they identified the tower sites that would provide the required coverage along the Northern Tier. Drawing on collective knowledge of the area, a list of site candidates was prepared and given to Motorola to run propagation studies. Using those studies and the coverage maps as a guide, they then drafted a proposed design. Site visits are being scheduled to validate the locations and conduct a detailed site inventory. After the sites have been validated, the team will work with Motorola to prepare a detailed design for the system.



With the proposed design in hand, the Technical Team is moving forward with the microwave vendors to determine a design of the microwave system. This will provide microwave paths to support the trunked portion of the system, and will define the bandwidth delivered to NTIC and partner locations.



The Contract Negotiations Team is working to define the procurement process for the NTIP. Work is under way to procure propagation maps, detailed design, and infrastructure services from Motorola. Work is also under way to identify procurement options in order to purchase the microwave backbone. Finally, work is under way to procure frequency identification and analysis services.



Don't forget that the Business Practice Review team will be formed soon. This team will answer the question "What's the best way to operate using the new system, in order to take the maximum advantage of it's features". This is a critical component of the system, and will lay the foundation for interoperable communications within the Northern Tier.







# Project Update (Continued)

And finally, please remember that the latest information on the NTIP can always be found on the project website at:

http://www.discoveringmontana.com/itsd/policy/councils/SIEC/cdprojects/ntip/ntip.asp

## Upcoming Events

4/7/05 - Monthly NTIC Board Meeting, Havre MT 4/6/05 - 4/8/05 - Technical Team Design Meeting, Havre MT



# The Six Levels of Interoperability

True Interoperability enables instant communication among multiple responders and agencies and more coordination, regardless of network type or agency affiliation.

The Association of Public-Safety Officers (APCO) defines a framework of six different interoperability levels. As a standards-based shared system, the NTIP is positioned to be interoperable at Level 6:

## Level 1: Swap Radios

- Simplest, most basic interoperability approach
- One agency or department provides extras of its own radios to another department working a common emergency scene

## Level 4: Gateway/ Console

- Uses specialized boxes to enable the connection of two otherwise incompatible communication systems
- Ideal solution to temporarily connect incompatible communications systems
- Cost efficient with an effective range that equals the sum of two systems being linked

#### Level 2: Talkaround

- Allows individuals to talk directly with each other, radio to radio as they work an emergency in a small geographic area
- Simple and cost-efficient, but works best when there are a maximum of three agencies responding

## Level 5: System-Specific Roaming

 Like roaming within a cellular system – user can maintain communication even if traveling outside of coverage area of home system, but only if agreements are in place to do so

## Level 3: Mutual Aid

 Requires dedicated spectrum and infrastructure to deliver communications and interoperability – most large urban areas, regions and states have mutual aid networks in place

## Level 6: Standards-Based Shared Systems

- Involves different systems operating on a standards-based, shared infrastructure with users working on both their home system and shared network
- Useful in all scenarios from small to massive scale
- Wide area, seamless coverage is economical since agencies share costs

Mark E. Adams Project Manager



